



IRON AGE

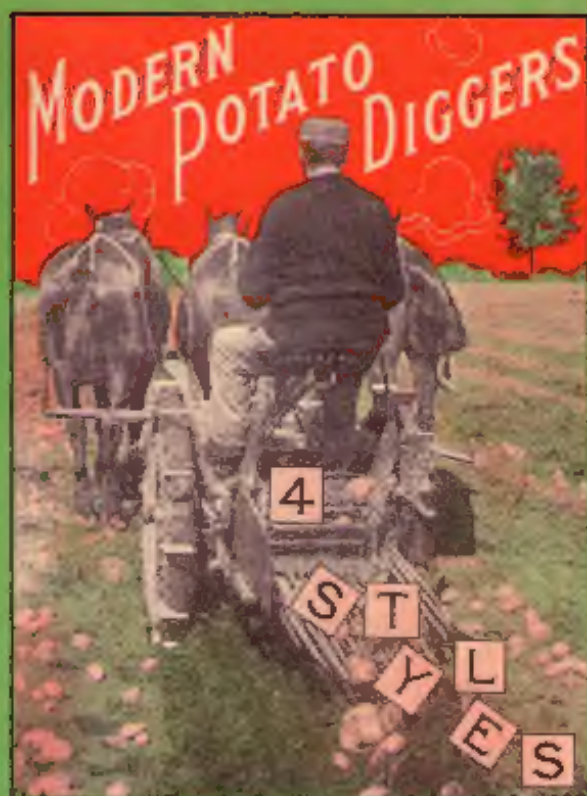
FARM, GARDEN AND ORCHARD IMPLEMENTS

American Factory
Established 1876

BATEMAN MFG CO.,
GREENLOCH, NEW JERSEY, U.S.A.

Canadian Factory

THE BATEMAN-WILKINSON CO., LIMITED
TORONTO, ONTARIO



When rightly chosen to suit your conditions, one of these diggers is guaranteed to do as good work as any machine of the kind can do—better than most.



TOOLS ARE
CARRIED IN STOCK
AT CENTERS OF DISTRIBUTION

LIBERAL STOCKS OF SUITABLE TOOLS FOR EACH VICINITY ARE CARRIED BY THE BEST CLASS OF IMPLEMENT AND HARDWARE DEALERS IN THE COUNTRY.

IF NOT HANDLED BY YOUR LOCAL DEALER, WRITE US FOR NEAREST ADDRESS WHERE TOOLS CAN BE SEEN AND EXPLAINED.

Wm. Klein's Bateman Mfg Co. Collection

WHICH DIGGER FOR YOUR FIELD?

Every potato patch at digging time is a problem all by itself. The soil may be light and sandy or a muddy field of clay. It may be almost free from weeds or choked with crab grass, or a rank growth of vines. The width of rows is bound to vary, also the depth of planting. You may practice level cultivation or ridge at various heights. The variety grown may set close to the hill or spread itself out.

And so we build four different styles of Diggers. A big one with plenty of agitation for extreme conditions, a smaller machine for lighter work and two models between. It's poor policy to strain a machine to meet big work or use a needless amount of machinery where less would be better. When a man tells you his Digger will work effectively under all conditions, dodge! He's fooling either you or himself.

But in any case it's the potatoes you want—all of them, without injury and in the quickest, cheapest way. Then read about our four models, examine them with one eye to the condition of your field, find out about provision for wear, adjustment of the plow for digging, shifting in gear from the seat, whether the Digger has a rigid pole allowing it to be backed and whether it will strain itself on rough ground or tip on hillsides.

Then—buy the Digger that's *built for you*. All over the country satisfied farmers call it, "*Iron Age*."

No. 155 is the big machine with 32-inch wheels, and elevator 22 inches wide, 60 inches long—a Digger for all conditions, heavy and light. No. 155 has been thoroughly tested

in two seasons and has been sold extensively in many large potato growing sections. We have in this Digger many improvements not to be found in any other Digger.

No. 156 has 32-inch wheels, also, elevator 20 inches wide and 54 inches long. This machine is for digging potatoes when the conditions of planting, variety grown and harvesting, warrant the use of the narrow elevator.

No. 157 has 28-inch wheels, and elevator 20 inches wide and 54 inches long. It is used for digging where less power and agitation are necessary.

Nos. 160-161 make up a combined machine, which can be used either as a Low Down Rotary Disc Digger or as an Elevator Digger with Shaker, to take care of heavy vines, grass and soil—where more separation is needed. Can be purchased in either form.

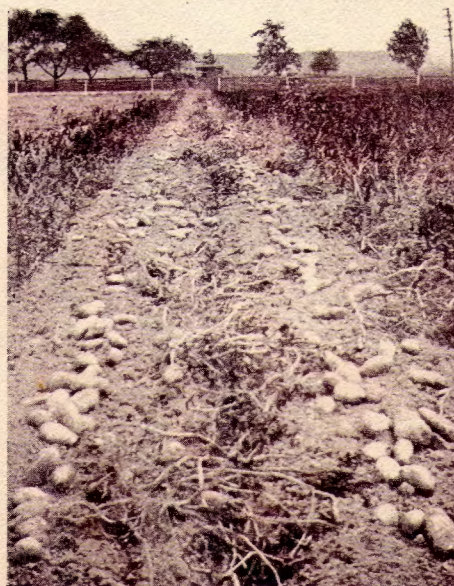
Any of these Diggers will work in rows that are 28 inches apart, if the variety grown set close to the hill—otherwise, they should be at least 30 inches apart.

Our Guarantee

We guarantee every "Iron Age" Digger, when rightly chosen for its work, to work as well as any other Digger of the same size and capacity. Also, we warrant the Digger for one year against breakage, caused by any defect in material, design or workmanship, and will replace defective parts when same are submitted for inspection and your claim is shown to be just.

BATEMAN M'F'G CO.,

Grenloch, New Jersey,
U. S. A.



The Trail of an "Iron Age" Digger



BATEMAN MFG CO.
GRENLOCH N.J. U.S.A.

IRON AGE

SEVENTY-EIGHT
YEARS IN BUSINESS



Wide Elevator Potato Digger

**No.
155**

For heaviest conditions of vines, grass, and soil. In some sections of the country the land is heavy, vines are sometimes over 4 feet high, and grass is very troublesome. These conditions need a machine with great traction power and wider, long elevators. Such a machine is No. 155.

Construction. Built almost entirely of malleable castings and steel—strong, compact, carefully fitted and keeps tightly bolted—the heavy work does not rack it to pieces. Has steel angles for side bars.

The plow is $\frac{5}{16}$ steel and all No. 155 will be fitted with stone fingers. When stones strike top of the plow, the fingers give so that there is no clogging.

Close adjustments are made, so that the plow does not take up more soil than is necessary in order to get the potatoes without cutting them.

Large elevator. The one on No. 155 is 22 inches wide and 60 inches long. This elevator is big enough to accommodate, without clogging, all that it will ever be asked to take care of.

Separation is done thoroughly. The elevator apron is made of interlocking steel cross bars and

elliptical sprockets give them just the right motion. The apron has no unnecessary tension and is driven direct by gearing from each side.

A clear, open elevator. There is nothing in the way of the potatoes and soil as they pass from the plow up the elevator. No potatoes are pushed aside on the plow, as the elevator sides extend out far enough on the plow to prevent it.

Separate, removable bearings (Fig. 471) carry the elevator apron. They are easily and cheaply replaced. **Fig. 472** shows the parts of the middle bearings—one of the parts is an agitator sprocket which can be changed for a plain round bearing with lugs, in cases where less agitation is needed or desired. The sleeve, shown at the left, can be changed to opposite sides and so get double the wear.

Note that the bearings are flanged and the washers set in so as to keep out sand and dust. **The repair expense** on this digger is not more than $\frac{1}{8}$ to $\frac{1}{4}$ as much per acre as on any other machine of the kind on the market.

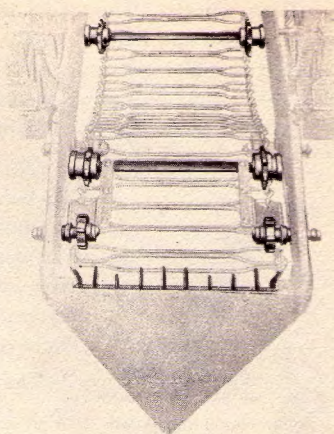


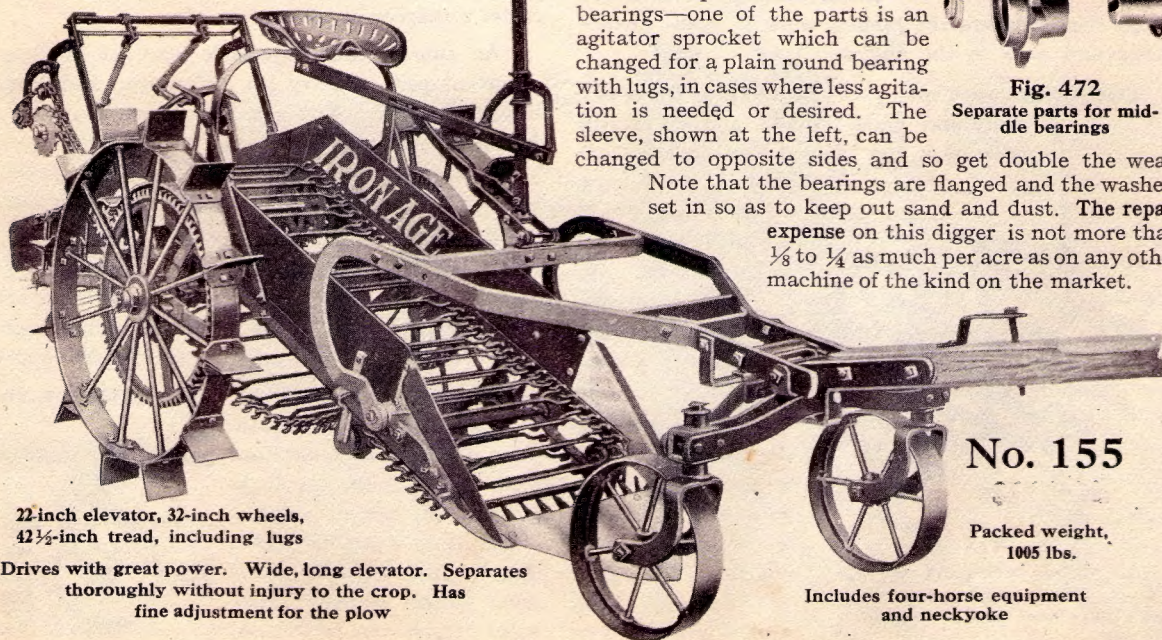
Fig. 471

A plain system of bearings and sprockets for the chain. Protected against dirt and are easily replaced when worn. Note also stone-finger attachment for plow.



Fig. 472

Separate parts for middle bearings



22-inch elevator, 32-inch wheels,
42 $\frac{1}{2}$ -inch tread, including lugs

Drives with great power. Wide, long elevator. Separates thoroughly without injury to the crop. Has fine adjustment for the plow

No. 155

Packed weight,
1005 lbs.

Includes four-horse equipment
and neckyoke

Wide Elevator Potato Digger—Continued

High wheels. They give more traction power and ride the holes and hollows easily. 32 inches in diameter, 3 inch rim, and large spurs ($4\frac{1}{2}$ inches wide) all help to give more traction. Heavy main gears in each wheel transmit the power to the machinery.

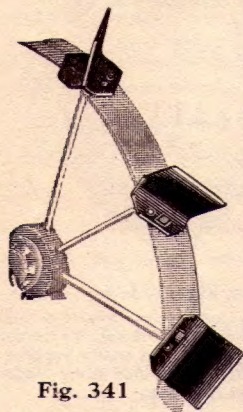


Fig. 341

Spurs set diagonally.
No slipping on hillside

The wheels have cast, removable hub box—the latter is the only part that can wear and is easily and cheaply replaced. The spurs can be bolted in diagonal position for holding on side hills. (Fig. 341)

The shaker has uniform motion—heavy crop, soil or grassy conditions do not affect it and it does its share for perfect separation. The shaker tines can be shaped to drop the potatoes in the middle of the row or at one side if desired.

Roller bearings on each side of the shaker, where the hardest work is done, reduce friction and wear to the minimum.

Steel kickers, with spring trip, help to keep the heavy vines and grass moving, and no matter how thick and tangled the bunch, it is soon worked loose by the kickers, which work the same way as on a tedder.

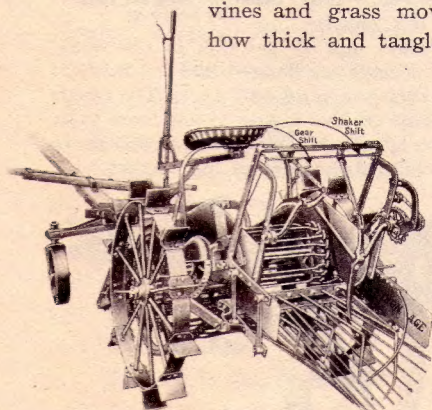


Fig. 473

Showing kickers, shaker and vine separator. Arrows indicate gear shifter and shaker lever, both in reach from the seat.

They are driven by chain and are tightened in a simple way.

A vine separator is furnished as a part of each shaker. Heavy growth of vines makes it desirable to separate them from the crop.

When you raise the shaker you don't have to lift the latch out of the notches—simply take hold of the top bar and pull back. The latch is lifted only when lowering—when the load is practically nothing.

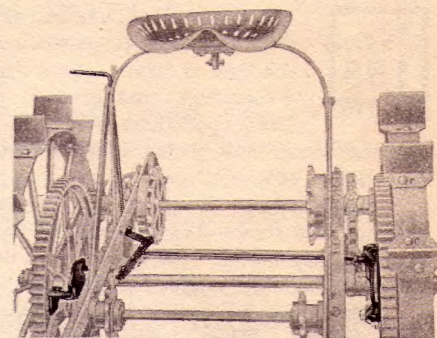


Fig. 474

Shifts from the seat. Saves scattering potatoes at ends of rows

Throws in and out of gear from the seat—the only digger that does—one lever shifts the pawls in both wheels at once. Operator does not have to get down—throws out of gear at the end of each row and keeps the potatoes on the shaker instead of scattering them as he turns the machine. Saves time and saves in picking up. A simple shifter arrangement, always in order.

An automatically adjustable foretruck is also a very important part of every No. 155 digger, and frequently decides the sale. You can turn short anywhere with this truck, without upsetting or straining the machine—has pivot connections with the pole, and the wheels swing on castors—the wheels hug the ground, even if it is uneven.

On level ground, in a ditch, on a grass hummock at edge of the field, over roots around a tree in the center of the field, on a side hill—they are all the same to the machine with this truck. Such a one is necessary where high ridging is practiced or where potatoes are planted in checks.

This digger can be backed, kept over the row, and you can hold the plow at any depth, because the pole connections make it impossible for it to swing to the side, although it is hinged to raise and lower. (Fig. 443) Machine is always under perfect control. How many diggers can be backed?

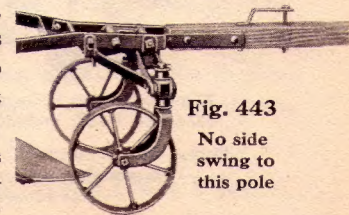


Fig. 443

No side swing to this pole



BATEMAN MFG CO.
GRENLOCH, N.J., U.S.A.

IRON AGE

SEVENTY-EIGHT
YEARS IN BUSINESS



Wide Elevator Potato Digger—Continued

Each No. 155 Digger is shipped with complete four-horse equipment, for four horses abreast.

Three-horse will be furnished, if preferred, but without reduction in price. **Fig. 379** shows a four-horse equalizer which will make a two-horse rig into the complete outfit for four. Also, note **Fig. 203**, three-horse equalizer, which includes parts necessary to change from two- to three-horse.



Fig. 379

Four-horse equalizer, complete (black parts only).

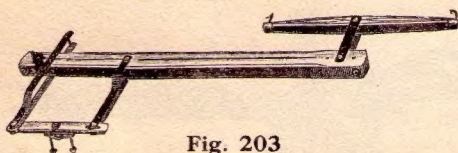


Fig. 203

Three-horse equalizer,
Three-horse equipment, complete,

The engraving on the right shows No. 155 in operation without the shaker or kickers—in this case the crop needed very little separation; in fact, the crop came through better without it. Here you find a saving in the running parts, in the draft and in the crop. You will be able to handle the work properly under light or heavy conditions.



No. 155 with shaker and kickers removed and yet it does perfect separating



No. 155. Thorough separation in a fairly heavy crop

Elevator Potato Digger

No. 156,

Price includes pair of doubletrees and neck-yoke

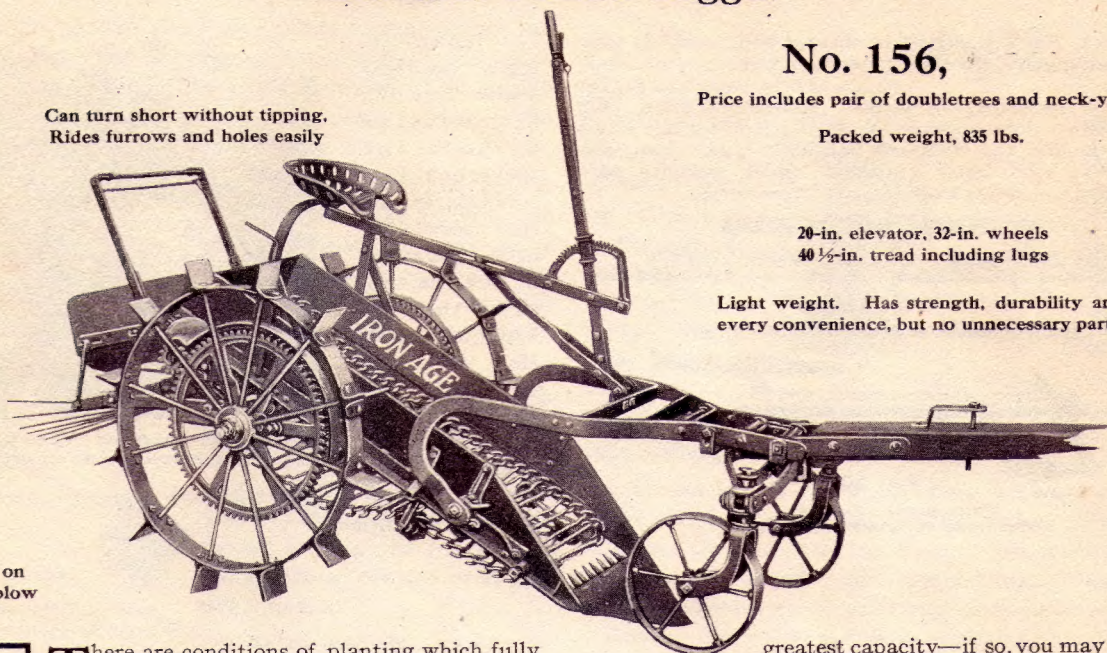
Packed weight, 835 lbs.

20-in. elevator, 32-in. wheels
 40 1/2-in. tread including lugs

Light weight. Has strength, durability and every convenience, but no unnecessary parts

Can turn short without tipping.
 Rides furrows and holes easily

Stone
 fingers on
 every plow



**No.
 156**

There are conditions of planting which fully warrant the use of a narrower elevator than that on No. 155 Digger. So we offer No. 156 with an elevator that is 20 inches wide and 54 inches long, the same high wheels and wide spurs and the same shaker as on No. 155. No kickers are supplied on No. 156 and a vine separator will be furnished only when ordered extra.

This Digger will do a great deal of hard digging under difficult conditions and in a satisfactory manner—it is warranted to do as good work under the same conditions as any other Digger of the same capacity and much better than some of them.

No. 156 is constructed of the same materials and with the same care as No. 155—it will last you a long time if properly chosen and properly taken care of. It may not be necessary for you to have the

greatest capacity—if so, you may as well save a few dollars with this machine.

Other equipment. As on No. 155, this Digger has same stone-finger plow and adjustments for plow, open elevator with sufficient agitation and removable bearings, gears shift from the seat on both sides at once and the same two-wheel fore truck.

Two-horse doubletrees and neck-yoke are furnished with every No. 156 without extra charge. Fig. 203, on page 3, shows three-horse equalizer and Fig. 379, the four-horse equalizer.



Separating vines and potatoes. Vines at one side

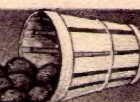
Vine Separator. This is entirely unnecessary in most crops, but if wanted, can be attached as on No. 155. It delivers the vines at one side and the potatoes in the middle or at the opposite side. When ordering with new machine, please add letter "B" to the number, as No. 156B,



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SEVENTY-EIGHT
YEARS IN BUSINESS



No. 156K Elevator Digger

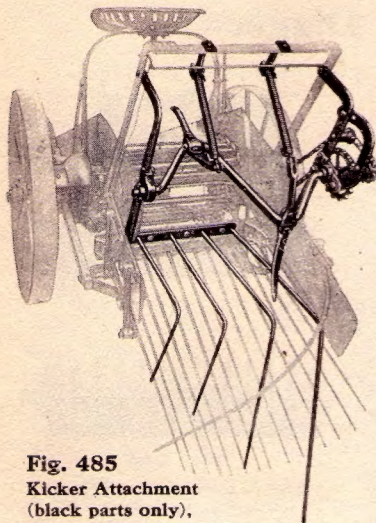


Fig. 485
Kicker Attachment
(black parts only).
Price, \$8.00

This is a machine made up by adding Kicker and Vine Turner Attachments to No. 156. In other respects it is the same. The Kickers and Vine Turners are same as on No. 155, except that they are made for a trifle narrower machine. They take care of extreme weedy conditions and heavy vines. The attachments can be applied to 1913 or new No. 156 Digger but if for 1913, say so. You can also order complete machine this way by specifying No. 156K.



Rear view of No. 155 showing same kind of kickers and vine turners at work

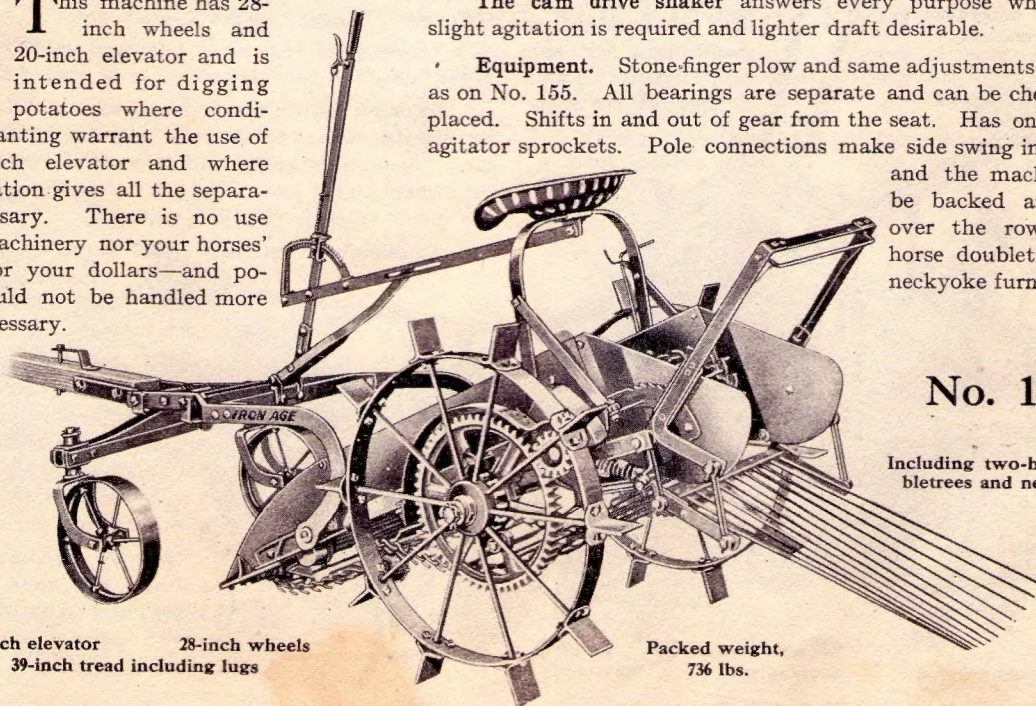
Elevator Potato Digger With Cam Drive Shaker

**No.
157**

This machine has 28-inch wheels and 20-inch elevator and is intended for digging potatoes where conditions of planting warrant the use of the 20-inch elevator and where slight agitation gives all the separation necessary. There is no use wasting machinery nor your horses' strength, or your dollars—and potatoes should not be handled more than is necessary.

The cam drive shaker answers every purpose where only slight agitation is required and lighter draft desirable.

Equipment. Stone-finger plow and same adjustments for plow as on No. 155. All bearings are separate and can be cheaply replaced. Shifts in and out of gear from the seat. Has one pair of agitator sprockets. Pole connections make side swing impossible and the machine can be backed and kept over the row. Two horse doubletrees and neckyoke furnished.



20-inch elevator 28-inch wheels
39-inch tread including lugs

Packed weight,
736 lbs.

No. 157

Including two-horse doubletrees and neckyoke

Low Down Roller Bearing Potato Digger

**No.
160**

For the potato grower whose soil and crop conditions change during the season, from easy early digging, where soil, potatoes and vines separate without trouble, to the late season, when vines, grass and weeds have rank growth, and the soil soggy, perhaps.

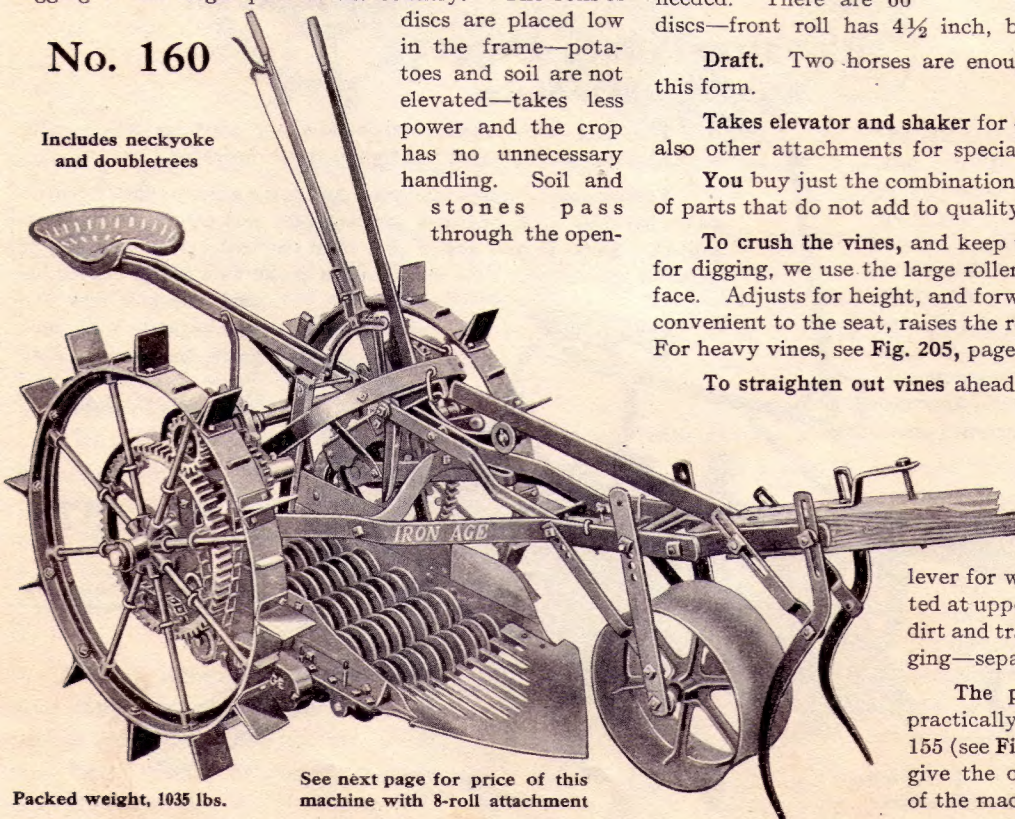
A combination machine like this is of real value because, in all cases, the grower uses the least possible amount of machinery and horse power to take the tubers out right.

Rotary disc separation, which is the basic principle of this digger, answers the purpose perfectly in the early digging of the larger part of the country. The rolls of

discs are placed low in the frame—potatoes and soil are not elevated—takes less power and the crop has no unnecessary handling. Soil and stones pass through the open-

No. 160

Includes neckyoke
and doubletrees



See next page for price of this
machine with 8-roll attachment

ings between the discs, which revolve continually while the machine is in motion and carry the potatoes to the ground at the rear.

Six rolls of discs are the regular equipment. In light, sandy soils, four or five rolls are enough, and for extreme cases in early digging, eight rolls can be used as shown on the next page (No. 163). The rolls are easily taken off and put on when needed. There are 66 discs—front roll has $4\frac{1}{2}$ inch, balance are $5\frac{1}{2}$.

Draft. Two horses are enough for the machine in this form.

Takes elevator and shaker for extra heavy conditions; also other attachments for special work.

You buy just the combination you need and not a lot of parts that do not add to quality or ease of the work.

To crush the vines, and keep them in the best shape for digging, we use the large roller, 14 x 8, with concave face. Adjusts for height, and forward and back—a lever, convenient to the seat, raises the roller clear of rocks, etc. For heavy vines, see Fig. 205, page 8.

To straighten out vines ahead of the roller, there are vine gatherers, shaped and adjusted for the purpose.

The plow is a wide, heavy steel blade, $\frac{5}{16}$ " thick—adjusted by lever for working depth, and slotted at upper end to let some of the dirt and trash through. No clogging—separation begins at once.

The pole connections are practically the same as on No. 155 (see Fig. 443, page 2) and they give the operator entire control of the machine.

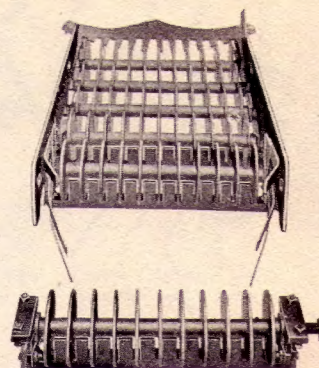


Fig. 338

A sieve for perfect separation
6th roll removed

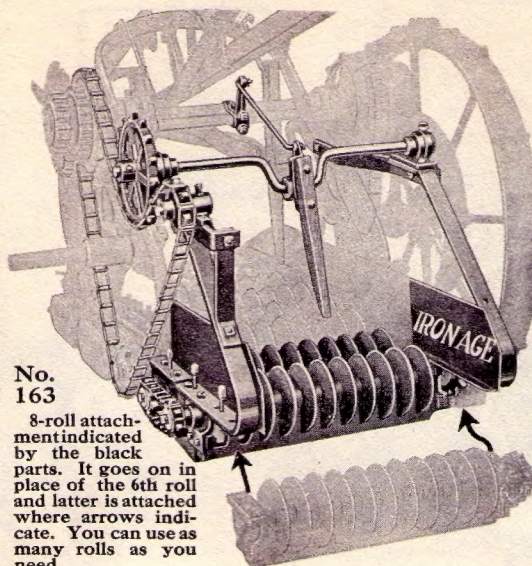
Low Down Roller Bearing Potato Digger—Continued

Kickers or tedder sticks keep the vines and trash on the move to the rear. Can be set to work together or alternately, as on a hay tedder.

The frame work is mostly of steel and malleable iron—a strong foundation to stand the heaviest work.

The wheels are cast iron with steel spokes and a large, heavy gear securely attached—power is applied from both sides at once. Each wheel has steel spurs for the added traction which is necessary in many soils.

The gearing is covered thoroughly and yet easy to get at. Chains and sprockets are coupled so that they can be disconnected easily when one or more rolls are to be taken off. A pair of small clutches throws



No. 163

8-roll attachment indicated by the black parts. It goes on in place of the 6th roll and latter is attached where arrows indicate. You can use as many rolls as you need.

the machine in gear from the seat.

8-roll attachment. A third more separating surface but comparatively little additional weight. Helps many growers to do without an elevator. No. 163 shows attachment in place and the 6th roll of the regular No. 160 ready to be bolted back of all. You use only as many rolls as you need. Extra tedder provided for heavy vines.

As attachments please order No. 123 for No. 120, No. 129 for No. 125 and No. 163 for No. 160. The cost includes extra links of chain to drive the attachment.

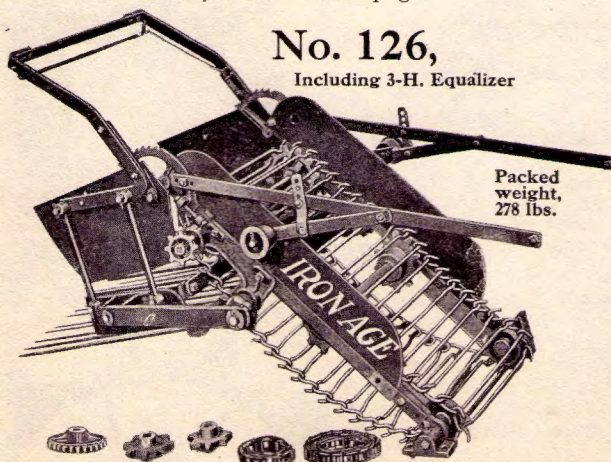
Complete 8-roll machine should be ordered by adding figure 8 to the number of machine, as No. 1608.

Combined Low Down and Elevator Digger

Nos.
161, 162

When conditions are heavy and the grower cannot get satisfactory separation with six or eight rolls, he can remove 5th and 6th rolls and attach Elevator with Shaker, No. 126 which makes No. 162, shown on next page.

No. 126,
Including 3-H. Equalizer



Packed weight, 278 lbs.

Elevator attachment. It is put on for better separation and to meet extreme conditions

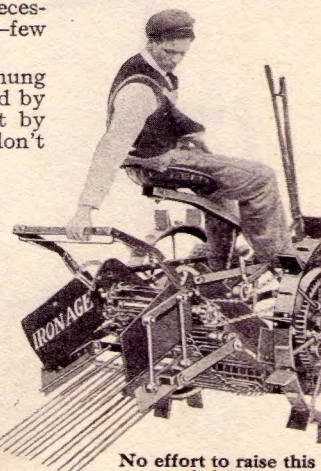
The chain (or apron) is made of interlocking steel cross bars, and elliptical sprockets give it the right motion, so that with the four front rolls of discs, and the shaker, there is perfect separation.

Driven from both sides, it has central even motion without danger of twist. Roller bearings (four sets) reduce friction. The elevator can be adjusted for height and chain tightened when necessary. Steel construction—few parts—easily put on.

The shaker is steel, hung from both sides, and is raised by the operator from his seat by simply pulling it up—don't have to release the ratchet—this is a decided advantage with a shaker heavy with soil and potatoes. Shaker can be removed when not needed.

The shaker tines can be shaped to leave the crop in the middle or at one side.

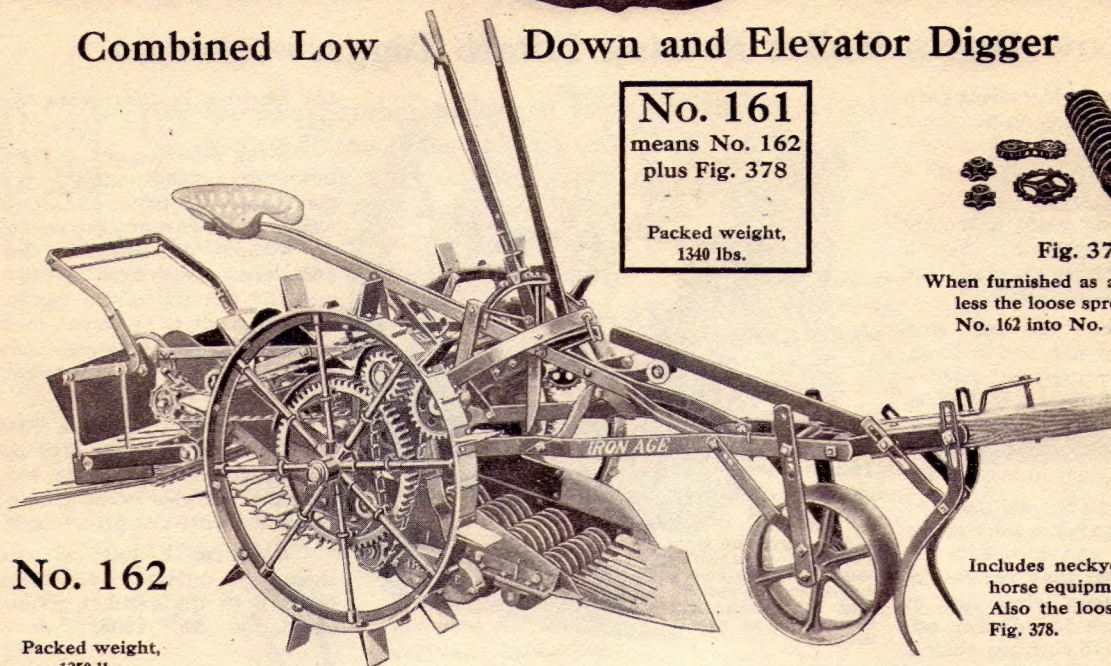
If vine separator is wanted for this machine, order as No. 2.



No effort to raise this shaker

Combined Low

Down and Elevator Digger



No. 162

Packed weight,
1250 lbs.

No. 161

means No. 162
plus Fig. 378

Packed weight,
1340 lbs.



Fig. 378

When furnished as an attachment,
less the loose sprocket, to make
No. 162 into No. 161,

Includes neckyoke and three-
horse equipment, complete.
Also the loose sprocket in
Fig. 378.

Three horses can handle the complete elevator digger without difficulty—the sets of discs help to lighten the load.

Equalizers. Each No. 160 has two-horse and No. 162 has three-horse equipment. Three-horse equalizers (Fig.

203) mean the parts necessary to change from two to three horses, driving abreast. **Four-horse equalizers** (Fig. 379) mean parts necessary to change from two to four horses, driving abreast. (See page 3.)

Attachments

Disc attachment, Fig. 205. For use in digging early white potatoes, also in the late crop, overrun with grass and weeds. Good where vines are extremely heavy growth—the concave discs cut and throw aside a large part of the vines and part of the soil. They are for use on old Nos. 120 and 125 and new No. 160, and should always be used when digging sweet potatoes with this style machine. Cannot be used with two-wheel equipment.

Fore truck (Fig. 301) can be supplied in place of the single roller at the same price for complete machine, No. 160, but it should be ordered with this truck as No. 160D. Fits every unevenness of ground, prevents strain on the frame, and operator can turn short at ends of rows without danger of upsetting. It is automatically adjustable—has pivot connections with the pole, and the wheels swing on castors.

Side hill spurs. Fig. 263. Complete sets of special steel spurs are furnished as an attachment for this machine. They are for extreme side hill conditions, and will hold the digger up to its work.

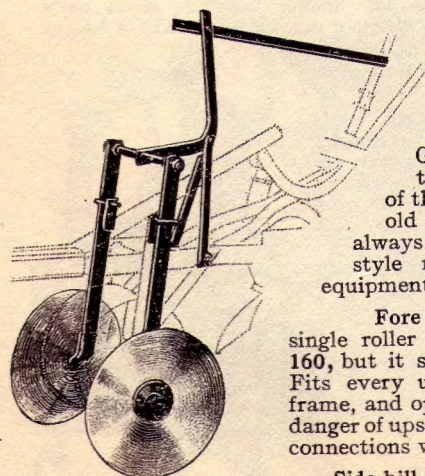


Fig. 205.

Disc attachment. For extreme conditions.

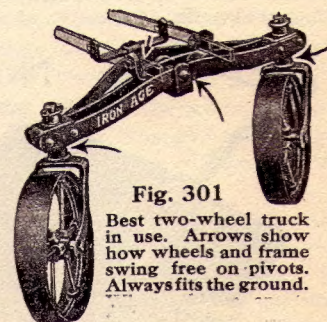


Fig. 301

Best two-wheel truck in use. Arrows show how wheels and frame swing free on pivots. Always fits the ground.

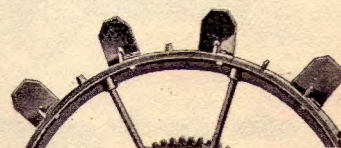


Fig. 263

Side hill spurs for wheels.



BATEMAN MFG CO.
GRENLOCH, N.J., U.S.A.

IRON AGE

SEVENTY-EIGHT
YEARS IN BUSINESS



In this Combined Low Down and Elevator Digger the *main advantage* is that its simplest form takes care of the crop in the majority of cases.

The view below shows the machine with elevator attachment, spurs on the wheels, and three horses are used—this combination gives better separation in the heavier soil.

In the upper view the Digger is working in light, sandy loam, and gives complete separation without too much handling of the potatoes. Two horses only were needed.



IRON AGE

COMBINED
DIGGER
IN
NEW
ZEALAND

HEAVY
SOIL AND
A VERY
HEAVY
CROP



ELEVATOR DIGGER
IN MICHIGAN
THROUGH SEPARATION



COMBINED ELEVATOR AND LOW DOWN DIGGER
IN PENNSYLVANIA



ELEVATOR DIGGER IN NEW
JERSEY, A BIG CROP
EASILY AND PERFECTLY
HARVESTED



NO. 11 IN MARYLAND



LOW DOWN ROTARY DIG MACHINE
DIGGING WHITE POTATOES
IN NEW JERSEY

ELEVATOR DIGGER
IN HEAVY CROP
IN BUSHES IN THE
ACRE, PENNSYLVANIA



Reports of James K.